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EXAMINER

ABEL JALIL, NEVEEN

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 03/31/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/902,560

Applicant(s)

HEJLSBERG ET AL

Examiner

Neveen Abel-Jalil

Art Unit

2175

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 120(b) (to a provisional application).

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 10, 12-14, 17-23, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Footy et al. (U.S. Patent No. 6,349,343) in view of Smedley et al. (U.S. Patent No. 5,761,494).

As to claims 1, 13-14, 21, and 22, Footy et al. discloses an application program interface (See column 5, lines 59-63, also see column 6, lines 30-35) embodied on one or more computer readable media (See column 8, lines 40-45, wherein "computer readable media" reads on "computer"), a network software architecture (See column 6, lines 52-56) comprising:

a first namespace related to data shared by a plurality of data providers (See column 7, lines 57-61);

a second namespace related to data used in an object-oriented database (See abstract, also see column 9, lines 65-67, and column 10, lines 1-9);

a third namespace related to data; and

a fourth namespace related to native data types within a server (See column 9, lines 23-27).

Footy et al. does not disclose user by SQL client and SQL server.

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Smedley et al. discloses user by SQL client and SQL server (See abstract, also see column 2, lines 55-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Foody et al. to include user by SQL client and SQL server.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Foody et al. by the teaching of Smedley et al. to include SQL because Structured Query Language allows for efficient access paths to specify which data to be accessed from a database which has evolved to be the standard language of networked serves leading to reduction in business costs (See Smedley et al. column 1, lines 25-32).

As to claim 2, Foody et al. as modified discloses wherein the SQL server is a Microsoft SQL Server (See Smedley et al. column 2, lines 1-3, also see column 4, lines 1-2).

As to claim 3, Foody et al. as modified discloses wherein the first namespace includes a data adapter class to exchange data between a data source and a data set (See column 10, lines 10-25).

As to claim 4, Foody et al. as modified does not disclose wherein the first namespace includes a data column mapping class to map column names from a data source to column names in a data table.

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Smedley et al. discloses wherein the first namespace includes a data column mapping class to map column names from a data source to column names in a data table (See column 4, lines 23-47, also see column 5, lines 32-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include wherein the first namespace includes a data column mapping class to map column names from a data source to column names in a data table.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Smedley et al. to include wherein the first namespace includes a data column mapping class to map column names from a data source to column names in a data table because it allows for accuracy and faster processing of the database conversion operations.

As to claim 5, Foody et al. as modified does not disclose wherein the first namespace includes a data table mapping class to map data returned from a query of a data source and a data table.

Smedley et al. discloses wherein the first namespace includes a data table mapping class (See column 6, lines 43-44) to map data returned from a query of a data source and a data table (See column 13, lines 1-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include wherein

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the first namespace includes a data table mapping class to map data returned from a query of a data source and a data table.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Smedley et al. to include wherein the first namespace includes a data table mapping class to map data returned from a query of a data source and a data table because it allows for accuracy and faster processing of the database conversion operations.

As to claim 6, Foody et al. as modified discloses wherein the first namespace (See column 10, lines 1-25) includes a row update class to indicate when an update to a row is started (See column 2, lines 51-59, also see Smedley et al. column 1, lines 15-22, wherein “started” reads on “transaction cost”).

As to claim 7, Foody et al. as modified discloses wherein the first namespace (See column 10, lines 1-25) includes a row update class to indicate when an update to a row is completed (See column 2, lines 51-59, also see Smedley et al. column 1, lines 15-22, wherein “completed” reads on “transaction cost”).

As to claim 8, Foody et al. as modified discloses wherein the to second namespace (See column 10, lines 1-25) includes a command builder class to automatically generate SQL statements for data table updates (See Smedley et al. column 6, lines 7-17).

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As to claim 10, Foody et al. as modified discloses wherein the third namespace (See column 10, lines 1-25) includes a command builder class to automatically generate SQL statements for data table updates (See Smedley et al. column 6, lines 7-17).

As to claim 12, Foody et al. as modified discloses wherein the third namespace includes a data adapter class (See column 10, lines 10-25) to exchange data between a data set and an SQL server for retrieving and saving data (See Smedley et al. column 3, lines 58-67, and column 4, lines 1-2).

As to claim 17, Foody et al. as modified discloses further comprising a data column collection class to identify the type of data each data column in a data table can contain (See column 11, lines 1-20, wherein "table" reads on "database").

As to claim 18, Foody et al. as modified discloses further comprising a data relation class to relate two data table objects to each other (See column 2, lines 51-59, also see Smedley et al. column 1, lines 15-22).

As to claim 19, Foody et al. as modified discloses further comprising a data row collection class to identify data stored in a data table (See column 11, lines 26-32, also see Smedley et al. column 1, lines 15-22, also see Smedley et al. column 7, lines 14-35).

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As to claim 20, Foody et al. as modified discloses further comprising a property collection class to add custom properties to a data table (See column 11, lines 26-32).

As to claim 23, Foody et al. as modified discloses wherein the common namespace includes:

a data adapter class to exchange data between a data source and a data set (See column 10, lines 10-25);

a row update class to indicate when an update to a row in a data table is completed (See column 2, lines 51-59, also see Smedley et al. column 1, lines 15-22).

Foody et al. as modified does not disclose a data column mapping class to map column names from a data source to column names in a data table;

a data table mapping class to map data returned from a query of a data source and a data table.

Smedley et al. discloses a data column mapping class to map column names from a data source to column names in a data table (See column 4, lines 23-47, also see column 5, lines 32-38);

a data table mapping class to map data (See column 6, lines 43-44) returned from a query of a data source and a data table (See column 13, lines 1-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include a data column mapping class to map column names from a data source to column names in a data table; a data table mapping class to map data returned from a query of a data source and a data table.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Smedley et al. to include a data column mapping class to map column names from a data source to column names in a data table; a data table mapping class to map data returned from a query of a data source and a data table because it allows for accuracy and faster processing of the database conversion operations.

As to claims 26, 27, and 28, Foody et al. discloses a computer system (See column 231, lines 2-9) including one or more microprocessors (See column 13, lines 42-49) and one or more software programs (See column 231, lines 2-9, wherein “software programs” reads on “executable”), the one or more software programs utilizing a application program interface to request services from an operating system (See column 5, lines 59-63, also see column 6, lines 30-35), the application program interface (See column 5, lines 59-63, also see column 6, lines 30-35) including separate commands to request services consisting of the following groups of service (See column 12, lines 60-67, and column 13, lines 1-7, wherein “groups of service” reads on “functions”), a method for managing network and computing resources for a distributed computing system (See column 4, lines 39-49):

calling one or more first functions (See column 12, lines 32-47) to facilitate sharing of data among multiple data providers (See column 6, lines 52-63, also see column 4, lines 39-49);

calling one or more second functions (See column 12, lines 32-47) to facilitate accessing object-oriented databases (See column 10, lines 10-25, also see column 2, lines 51-59);

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calling one or more fourth functions (See column 12, lines 32-47) to facilitate server operations (See column 16, lines 11-34).

Foody et al. does not disclose calling one or more third functions to facilitate SQL client operations, and SQL server.

Smedley et al. discloses SQL (See abstract, also see column 2, lines 55-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Foody et al. to include calling one or more third functions to facilitate client operations; and SQL server.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Smedley et al. to include SQL because Structured Query Language allows for efficient access paths to specify which data to be accessed from a database which has evolved to be the standard language of networked servers leading to reduction in business costs (See Smedley et al. column 1, lines 25-32).

As to claim 29, Foody et al. as modified discloses wherein the first functions to comprise functions for exchanging data between a data source and a data set (See column 10, lines 10-25), and indicating when an update to a row is completed (See column 2, lines 51-59, also see Smedley et al. column 1, lines 15-22).

Foody et al. as modified does not disclose mapping column names from a data source to column names in a data table.

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Smedley et al. discloses mapping column names from a data source to column names in a data table (See column 6, lines 43-44, also see column 13, lines 1-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include mapping column names from a data source to column names in a data table.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Smedley et al. to include mapping column names from a data source to column names in a data table because it allows for accuracy and faster processing of the database conversion operations.

As to claim 30, Foody et al. as modified discloses wherein the second functions comprise functions for generating SQL statements for data table updates and enabling a connection to a data source (See Smedley et al. column 6, lines 7-17).

3. Claims 9, 11, 24-25, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foody et al. (U.S. Patent No. 6,349,343) in view of Smedley et al. (U.S. Patent No. 5,761,494) as applied to claims 1-8, 10, 12-14, 17-23, 26-30 above, and further in view of Pettus (U.S. Patent No. 6,360,266).

As to claim 9, Foody et al. as modified discloses wherein the second namespace (See column 7, lines 8-20).

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Foody et al. does not disclose includes a connection class to enable a connection to a data source.

Pettus discloses includes a connection class to enable a connection to a data source (See column 17, lines 47-52, also see column 9, lines 49-60, and see column 6, lines 21-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include a connection class to enable a connection to a data source.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Pettus to include a connection class to enable a connection to a data source because it provides for security and faster connection leading to reduction in business costs.

As to claim 11, Foody et al. as modified discloses wherein the third namespace (See column 7, lines 8-20) to an SQL server data source (See Smedley et al. column 3, lines 9-36).

Foody et al. as modified does not disclose includes a connection class to represent a unique session.

Pettus discloses includes a connection class to represent a unique session (See column 13, lines 15-35, also see column 13, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include a connection class to represent a unique session.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Pettus to include a connection class to represent a unique session because it provides for security and faster connection leading to reduction in business costs.

As to claim 24, Foody et al. as modified discloses wherein the object-oriented namespace (See column 1, lines 14-26, also see column 10, lines 10-25) includes:

a command builder class to generate SQL statements for data table updates (See Smedley et al. column 6, lines 7-17); and

Foody et al. as modified does not disclose a connection class to enable a connection to a data source.

Pettus discloses a connection class to enable a connection to a data source (See column 17, lines 47-52, also see column 9, lines 49-60, and see column 6, lines 21-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include a connection class to enable a connection to a data source.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Pettus to include a connection class to enable a connection to a data source because it provides for security and faster connection leading to reduction in business costs.

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As to claim 25,  Foody et al.  as modified discloses wherein the SQL client namespace (See  Smedley et al.  abstract, also see  Smedley et al.  column 2, lines 1-16, also see  Foody et al.  column 7, lines 8-20) includes:

a command builder class to generate SQL statements for data table updates (See  Smedley et al.  column 6, lines 7-17);

a data adapter class to exchange data (See column 18, lines 37-52) between a data set and an SQL server for retrieving and saving data (See  Smedley et al.  abstract, also see  Smedley et al.  column 3, lines 9-36).

Foody et al.  does not disclose a connection class to represent a unique session data source.

Pettus  discloses a connection class to represent a unique session to data source (See column 13, lines 15-36, and column 13, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified  Foody et al.  as modified to include a connection class to represent a unique session to data source.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified  Foody et al.  as modified by the teaching of  Pettus  to include a connection class to represent a unique session to data source because it provides for security and faster connection leading to reduction in business costs.

As to claim 31,  Foody et al.  as modified discloses wherein the third features comprise functions for generating SQL statements for data table updates (See  Smedley et al.  column 6,

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lines 7-17) to an SQL server data source (See Smedley et al. abstract, also see Smedley et al. column 3, lines 9-36).

Foody et al. as modified does not disclose and representing a unique session.

Pettus discloses and representing a unique session (See column 13, lines 15-36, and column 13, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include representing a unique session.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Pettus to include representing a unique session because it provides for security and faster connection leading to reduction in business costs.

4. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foody et al. (U.S. Patent No. 6,349,343) in view of Smedley et al. (U.S. Patent No. 5,761,494) as applied to claim 14 above, and further in view of Mellmer (U.S. Patent No. 6,446,253).

As to claim 15, Foody et al. as modified does not disclose further comprising a constraint Class to maintain the integrity of data in a data table.

Mellmer discloses further comprising a constraint Class to maintain the integrity of data in a data table (See column 6, lines 62-67, wherein “constraint class” reads on “access control”).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include further comprising a constraint Class to maintain the integrity of data in a data table.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Mellmer to include further comprising a constraint Class to maintain the integrity of data in a data table because it provides for security and class boundaries causing reduction in business costs.

As to claim 16, Foody et al. as modified does not disclose further comprising a data column class to create a data table.

Mellmer discloses further comprising a data column class to create a data table (See column 6, lines 45-49, wherein “table” reads on “hierarchy”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified to include further comprising a data column class to create a data table.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Foody et al. as modified by the teaching of Mellmer to include further comprising a data column class to create a data table because it creates ease of update and data manipulation allowing for increase in database processing.

### ***Conclusion***

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114.

The examiner can normally be reached on 8:00AM-4: 30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Neveen Abel-Jalil  
March 23, 2003

  
DOV POPOVICI  
SUPERVISORY PATENT EXAMINER  
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